

1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3
4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
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7
8 *Ex parte* SUSAN G. KATZ
9

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11 Appeal 2007-3309
12 Application 10/647,618
13 Technology Center 3600
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16 Decided: November 26, 2007
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20 *Before:* WILLIAM F. PATE, III, TERRY J. OWENS and
21 STEVEN D.A. McCARTHY, *Administrative Patent Judges.*
22
23 McCARTHY, *Administrative Patent Judge.*

24
25 DECISION ON APPEAL
26

27 STATEMENT OF THE CASE

28 The Appellant appeals under 35 U.S.C. § 134 (2002) from the final
29 rejection of claims 1-12 and 14-23. We have jurisdiction under 35 U.S.C.
30 § 6(b) (2002).

Independent claim 1 is representative of the Appellant's claims and
reads as follows:

1. A decorative external curtain assembly for applying fabric material to an external facade of a building, the assembly comprising:
 - a sheet of fabric material;
 - complementary engageable fastener strips for respectively fastening the fabric material to the external façade of the building; and
 - an attachment arrangement for attaching one of the complementary engageable fastener strips to the building and another of the complementary engageable fastener strips to the fabric material; and
- wherein the complementary engageable fastener strips are made of a pair of strips, one strip having co-acting miniature hooks formed of a relatively rigid filament material and another of the strips having loops also formed of a relatively rigid filament material which engage one another to form a bond between the building and the fabric that is broken by pulling apart the pair of strips; and
- wherein the complementary engageable fastener strips fasten the fabric material to the external façade along an entire edge of the fabric material.

The appealed claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hillstrom (U.S. Patent 5,040,586) in light of Phillips (U.S. Patent 5,074,348).

We affirm.

ISSUE

The sole issue in this appeal is whether the Examiner erred in contending that the substitution of hook-and-loop material as taught by Phillips into a system for holding and displaying a banner as taught by Hillstrom would have been obvious.

FINDINGS OF FACT

The record supports the following findings of fact (“FF”) by a preponderance of the evidence.

1. Hillstrom discloses a system for holding and displaying a banner on an exterior surface of a building. (Hillstrom, col. 1, ll. 5-7; col. 2, ll. 55-68). The banner may be made from vinyl material, plastic material or any “appropriate material.” (Hillstrom, col. 3, ll. 23-31). The parties do not dispute the Examiner’s contention that the “appropriate material” for the banner may be a sheet of fabric material. (See Office Action, Jan. 13, 2005 at 2). Hillstrom’s system uses a “frame device” which suspends the banner on hooks between an extruded aluminum base member screwed or nailed into the building surface and an extruded aluminum cover member biased over the free ends of the hooks. (Hillstrom, col. 4, l. 59 –col. 5, l. 3 and col. 4, ll. 8-14). Hillstrom states that the system “allows relatively quick and easy changes of the banners.” (Hillstrom, col. 1, ll. 51-56).

2. The Examiner found that “Hillstrom discloses a banner attached to the exterior of a building, the banner being made of ‘any appropriate material,’ which clearly includes a fabric. The banner is removably attached so that it can be changed easily, column 2 lined [*sic*, lines] 29-33. It is

1 attached to an eave at the roof line of a fast food restaurant. What is not
2 shown are the hook and loop fasteners.” (Office Action, Jan. 13, 2005 at 2).
3 Although the Appellant expressly agreed that “Hillstrom fails to disclose the
4 use of hook and loop fasteners for attaching a banner to the exterior of a
5 building” (Br. 6), the Appellant did not traverse the Examiner’s other
6 findings as to the scope and content of Hillstrom.

7 3. Phillips teaches “a valance treatment for a window which is
8 made of standard components both swags and jabot elements that can easily
9 be mounted to suit almost any width of window.” (Phillips, col. 1, ll. 46-
10 50). The swags are formed from textile materials. “Attachment strips”
11 consisting of hook and loop tape are sewn across the top of each swag.
12 (Phillips, col. 2, ll. 53-59; col. 3, ll. 1-2; and Fig. 4). The valance treatment
13 is supported by a wood strip extending from a wall. A strip of hook-tape or
14 loop-tape is attached to the top of the wood strip. The attachment strip sewn
15 to the top edge of each swag is pressed against the hook-tape or loop-tape
16 lying on the wood strip so that the swag folds over the exposed side of the
17 wood strip. (Phillips, col. 3, ll. 8-24).

18 19 PRINCIPLES OF LAW

20 A claim is unpatentable for obviousness under 35 U.S.C. § 103(a) if
21 “the differences between the subject matter sought to be patented and the
22 prior art are such that the subject matter as a whole would have been obvious
23 at the time the invention was made to a person having ordinary skill in the
24 art to which said subject matter pertains.” In *Graham v. John Deere Co.*,
25 383 U.S. 1 (1966), the Supreme Court set out factors to be considered in
26 determining whether claimed subject matter would have been obvious:

1
2 Under § 103, the scope and content of the prior art
3 are to be determined; differences between the prior
4 art and the claims at issue are to be ascertained;
5 and the level of ordinary skill in the pertinent art
6 resolved. Against this background the obviousness
7 or nonobviousness of the subject matter is
8 determined. Such secondary considerations as
9 commercial success, long felt but unsolved needs,
10 failure of others, etc., might be utilized to give
11 light to the circumstances surrounding the origin of
12 the subject matter sought to be patented.
13

14 *Id.*, 383 U.S. at 17-18.

15 In order to reject a claim under 35 U.S.C. § 103(a), an examiner must
16 establish a “prima facie” case for obviousness. If the examiner rejects the
17 claim, the applicant may submit arguments detailing reasons why the
18 applicant believes the examiner failed to make a prima facie case. Once the
19 examiner establishes a prima facie case, however, the claim is properly
20 rejected unless the applicant submits evidence proving sufficient new facts
21 such that the sum of the facts before the examiner does not to prove the
22 claimed subject matter obvious. *See In re Dillon*, 919 F.2d 688, 692-93
23 (Fed. Cir. 1990) (*en banc*).

24 An examiner cannot establish a prima facie case that a claim is
25 obvious “merely by demonstrating that each of its elements was,
26 independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 127
27 S.Ct. 1727, 1741 (2007). Since not every combination of prior art references
28 which happens to show each of the elements recited in a claim will suffice to
29 establish a prima facie case for obviousness, the examiner must articulate
30 reasons why the teachings of a particular combination suffice. That said, an

1 examiner establishes a prima facie case that claimed subject matter is
2 obvious when the examiner articulates reasons consistent with the level of
3 ordinary skill in the art at the time of the invention why (in the words of 35
4 U.S.C. § 103(a)) “the differences between the subject matter sought to be
5 patented and the prior art are such that the subject matter as a whole would
6 have been obvious at the time the invention was made to a person having
7 ordinary skill in the art to which said subject matter pertains.”

8
9 ANALYSIS

10 The first step in determining whether the Examiner has established a
11 prima facie case for obviousness is to determine the scope and content of the
12 prior art. With respect to claim 1, Hillstrom discloses a decorative external
13 curtain assembly for applying a sheet of an “appropriate material” to a wall.
14 The parties do not dispute that the Examiner’s contention that the
15 “appropriate material” could be a sheet of fabric material. (FF 1).

16 Phillips teaches complementary engageable fastener strips (namely,
17 hook-tape and loop-tape) sewn to a fabric material for engagement along an
18 entire edge of the fabric material. (FF 3). The limitation of claim 1:

19
20 wherein the complementary engageable fastener
21 strips are made of a pair of strips, one strip having
22 co-acting miniature hooks formed of a relatively
23 rigid filament material and another of the strips
24 having loops also formed of a relatively rigid
25 filament material which engage one another to
26 form a bond between the building and the fabric
27 that is broken by pulling apart the pair of strips
28

1 merely describes the structure and predictable operation of such hook tape
2 and loop tape. The parties do not dispute the Examiner's contention that the
3 use of hot glue or another adhesive for attaching lightweight materials such
4 as hook-and-loop material to solid surfaces such as the external facades of
5 buildings was within the level of ordinary skill in the art. (*See Office*
6 *Action*, Sept. 22, 2005 at 2-3).

7 The second step in determining whether the Examiner has established
8 a prima facie case for obviousness is to ascertain the differences between the
9 prior art and the claims at issue. The only differences between Hillstrom's
10 system and the subject matter of claim 1 is that, in the assembly of claim 1, a
11 fastener strip of hook-and-loop material sewn across an entire edge of a
12 fabric material and another fastener strip adhered to the building surface are
13 used to fasten the fabric material to the building surface. (FF 2). The
14 fastener strips and their attachment arrangement are taught or suggested by
15 Phillips.

16 The third step in determining whether the Examiner has established a
17 prima facie case for obviousness is to resolve the level of ordinary skill in
18 the art. The factors which may be considered in determining the level of
19 ordinary skill include the teachings of the prior art references themselves;
20 the education and experience of the inventor; and the sophistication of the
21 technology. *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed.
22 Cir. 2007). The Appellant does not contest that hook-and-loop material
23 predictably creates temporary bonds which are easily broken by pulling
24 apart the hook and loop tapes. (Specification 3). The Appellant's
25 background suggests that one skilled in the art would have had "considerable
26 experience with regard to the use of textiles and fabrics as articles of

1 manufacture” (Rule 132 Affidavit, Nov. 2, 2004, ¶ 2). Given this level of
2 experience and the well-known prevalence of hook-and-loop material in
3 garments and other textile products, one skilled in the art would have
4 recognized that hook-and-loop material could be used to fasten fabric
5 materials to substrates and that fabric materials fastened by hook-and-loop
6 material could be easily detached. (FF 4). Given the relatively
7 unsophisticated nature of the technology, one skilled in the art would have
8 had the capacity to use hook-and-loop material to hold and display a fabric
9 material against an external facade of a building.

10 The final step in determining whether the Examiner has established a
11 prima facie case of obviousness is to determine whether the Examiner
12 articulated reasons why the differences between the subject matter sought to
13 be patented and the prior art are such that the subject matter as a whole
14 would have been obvious to a person having ordinary skill in the art. The
15 reasons for combining the teachings of the prior art may arise from the
16 nature of the combination itself. For example, a simple substitution of one
17 known element for another according to a known method to obtain
18 predictable results is prima facie unpatentable. *KSR*, 127 S.Ct. at 1740.

19 In the present case, it would have been obvious to substitute hook-
20 and-loop material sewn to a fabric material for engagement along an entire
21 edge of the fabric material as taught by Phillips into a system for holding
22 and displaying the fabric material on an exterior building surface as taught
23 by Hillstrom. Phillips taught that hook-and-loop material could be used to
24 hang a sheet of fabric material indoors. Substituting the hook-and-loop
25 material of Phillips for the “frame device” of Hillstrom would not change
26 the manner in which the hook-and-loop material fastened the fabric material

1 to the building surface—the substitution would merely move the hook-and-
2 loop material from an indoor location to an outdoor location. As such, the
3 results of the substitution would have been predictable. These reasons alone
4 suffice to establish a prima facie case that the subject matter of the claim 1
5 was obvious.

6 The Appellant argues that a passage in Hillstrom criticizing “known
7 systems and devices” as unreliable, particularly when “placed outdoors
8 where they are subject to high winds and other harsh conditions” (Hillstrom,
9 col.1, ll. 32-34) teaches away from the substitution of hook-and-loop
10 material for the “frame device” disclosed in Hillstrom. (Br. 8-9). The
11 Examiner correctly observed that Hillstrom does not criticize the use of
12 hook-and-loop material specifically to hold and display banners outdoors.
13 (Ans. 4-5). The Examiner also observed that substituting hook-and-loop
14 material as taught by Phillips for the “frame device” disclosed by Hillstrom
15 in an outdoor display would “render changing of the banner easier.” (Ans.
16 3; *compare* Specification 3 (stating that hook-and-loop material creates
17 temporary bonds that are easily broken by pulling apart the hook-and-loop
18 strips) *with* Hillstrom, col. 5, ll. 41-63 (describing sequence of steps required
19 to change a banner held in Hillstrom’s “frame device.”)). Hillstrom does not
20 teach away from the claimed subject matter because the reference’s criticism
21 of “known systems and devices” is not specific enough to have discouraged
22 one skilled in the art motivated to use hook-and-loop material to simplify the
23 changing of outdoor banners.

24 The Appellant further argues that the claimed subject matter was
25 intended to address the problem of displaying a sheet of fabric material
26 outdoors and that the alleged unreliability of hook-and-loop material renders

1 it unsuitable to solve this problem. In support of this argument, the
2 Appellant cites *In re Wright*, 848 F.2d 1216, 1219 (Fed. Cir. 1988) for the
3 proposition that “the question posed, is whether what the Appellant did
4 would have been obvious to one of ordinary skill in the art *attempting to*
5 *solve the problem upon which the inventor was working.*” (Br. 11 [emphasis
6 added]). This proposition does not represent the current state of the law. *In*
7 *re Translogic Tech., Inc.*, Appeal No. 2006-1192 slip op. at 18-19 (Fed. Cir.
8 Oct. 12, 2007); *see also In re Dillon*, 919 F.2d 688, 693 (Fed. Cir. 1990) (*en*
9 *banc*) (overruling *Wright* at least in part). The subject matter of claim 1
10 consists of known elements combined in a known manner yielding
11 predictable results. This rationale suffices to establish prima facie
12 obviousness.

13 The Appellant submitted a “Rule 132 Affidavit” declaring that, in the
14 Appellant’s experience,

15
16 the idea that [hook-and-loop] tape could be
17 effectively used to attach a curtain to the outside of
18 a building where the curtain is subjected to harsh
19 environmental conditions is unexpected because
20 the general opinion in the art is that [hook-and-
21 loop material] would form too weak a bond to
22 effective [*sic*] hold the banner or curtain to the
23 exterior of the building when harsh environmental
24 conditions such as wind and rain are encountered
25 by the exterior curtain.
26

27 (*Id.*, ¶ 7). The Appellant’s opinion regarding the legal issue of whether the
28 differences between the claimed subject matter and the prior art would have
29 been obvious to a person having ordinary skill in the art is not evidence in
30 the case. *In re Lindell*, 385 F.2d 453, 456 (C.C.P.A. 1967). To the extent

1 that the Appellant sought to offer opinion testimony regarding the level of
2 skill in the art or to establish “unexpected results” as secondary evidence of
3 non-obviousness, the Appellant’s opinion testimony does not overcome the
4 strong prima facie evidence proving the obviousness of claim 1. *See id.*;
5 *Leapfrog Enterps., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir.
6 2007).

7 On the record before us, the Appellant has not rebutted the
8 Examiner’s prima facie case that the subject matter of representative claim 1
9 was obvious. Since the Appellant did not separately argue the patentability
10 of claims 3 and 6-21, those claims fall with claim 1.

11
12 CONCLUSION OF LAW

13 On the record before us, the Appellant has not shown that the
14 Examiner erred in rejecting the claims 1, 3 and 6-21 as being unpatentable
15 over Hillstrom in light of Phillips.

16
17 DECISION

18 The Examiner’s rejection of claims 1, 3 and 6-21 is affirmed.

19
20 AFFIRMED

21 JRG

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